

(19) World Intellectual Property
Organization
International Bureau



(43) International Publication Date
6 May 2005 (06.05.2005)

PCT

(10) International Publication Number
WO 2005/039378 A3

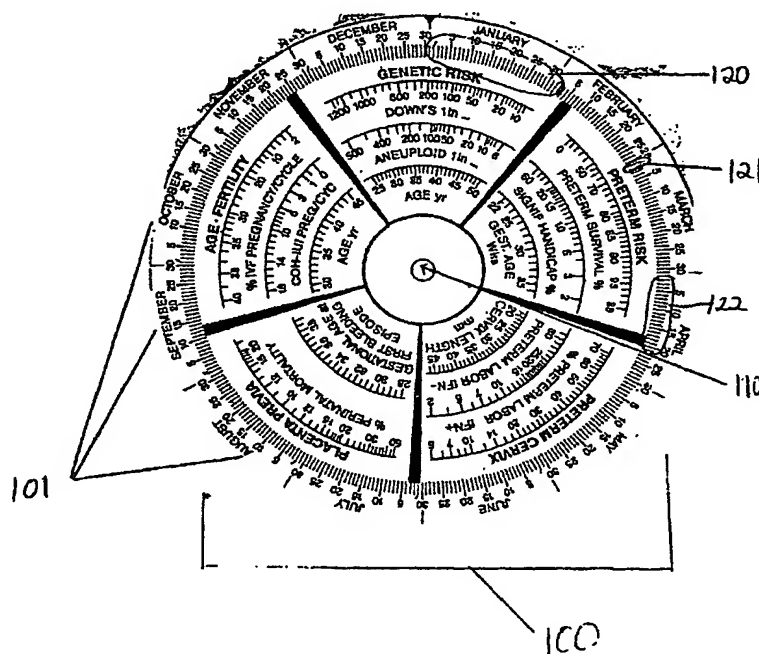
- (51) International Patent Classification⁷: **G06C 3/00**
- (21) International Application Number:
PCT/IB2004/052224
- (22) International Filing Date: 28 October 2004 (28.10.2004)
- (25) Filing Language: English
- (26) Publication Language: English
- (30) Priority Data:
60/515,222 28 October 2003 (28.10.2003) US
- (71) Applicant and
(72) Inventor: **CRAIG, H, Randall** [US/US]; Fertility Treatment Center, P.C., 3200 N. Dobson Rd. Suite F-7, Chandler, AZ 85224 (US).
- (74) Agent: **OPPEDAHL, Carl**; Oppedahl & Larson LLP, 256 Dillon Ridge Road P O Box 5068, Dillon, CO 80435-5068 (US).

(81) Designated States (*unless otherwise indicated, for every kind of national protection available*): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

(84) Designated States (*unless otherwise indicated, for every kind of regional protection available*): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

[Continued on next page]

(54) Title: **ADVANCED GESTATIONAL WHEEL CALCULATOR**



(57) Abstract: The gestational wheel calculator of the current invention greatly extends the function and usefulness of the basic gestational calculation wheel by providing increased accuracy of gestational dates by using an average cycle length adjuster, provides paternity information using a sperm exposure marker (420), provides more accurate ultrasound and other test measurements by using scales printed parallel to gestational age, and provide a means of accurately aligning these measurements with the proper calendar (430) or gestational date by including a transparent marker arm (600). In addition, normal range and error functions are included on the marker arm. A one-fourth year window is used to increase the surface area of information available for viewing charts, tables, and promotions on the underlying base plate. Easier reading of the calculator is provided by special markers for the first day of each calendar month and by providing sub-marks for each day within a gestational week. Scheduling conflicts

are improved by providing a weekday scale covering the entire nine month duration of pregnancy. The other side of the gestational wheel can be used to provide additional promotional or informational items including rotating transparent windows to display additional surface area, to provide means of calculating algorithm solutions for body mass index, and display observational data for EFW, delta OD 450, and AFI.



Published:

- with international search report
- before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(88) Date of publication of the international search report:

13 October 2005

INTERNATIONAL SEARCH REPORT

International application No.

PCT/IB04/52224

A. CLASSIFICATION OF SUBJECT MATTER

IPC(7) : G06C 3/00

US CL : 235/88RC

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

U.S. : 235/88RC, 78R, 78RC, 85FC, 116; 40/111, 113, 114, 115, 595

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched
NONE

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)
Please See Continuation Sheet

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y,P	US 6,789,728 B1 (MUZZAMMEL) 14 September 2004 (14.09.2004), column 2, lines 32-61, fig. 2.	1-31
Y,P	US 6,637,137 B2 (COSTER et al) 28 October 2003 (28.10.2003), column 2, lines 10-65, fig. 1.	1-31
X,P	US 6,886,740 B1 (CRAIG) 03 May 2005 (03.05.2005), see entire document.	1-31
A	US 5,763,860 A (DENIS et al) 09 June 1998 (09.06.1998), see entire document.	1-31
A	US 4,092,521 A (WEISSHAAR) 30 May 1978 (30.05.1978), see entire document.	1-31

☐ Further documents are listed in the continuation of Box C.

☐ See patent family annex.

* Special categories of cited documents:

"A" document defining the general state of the art which is not considered to be of particular relevance

"E" earlier application or patent published on or after the international filing date

"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)

"O" document referring to an oral disclosure, use, exhibition or other means

"P" document published prior to the international filing date but later than the priority date claimed

"T"

later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

"X"

document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

"Y"

document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art

"&"

document member of the same patent family

Date of the actual completion of the international search

02 August 2005 (02.08.2005)

Date of mailing of the international search report

09 AUG 2005

Name and mailing address of the ISA/US

Mail Stop PCT, Attn: ISA/US
Commissioner for Patents
P.O. Box 1450
Alexandria, Virginia 22313-1450

Facsimile No. (703) 305-3230

Authorized officer

Karl D. Frech

Telephone No. 571 272 2390

INTERNATIONAL SEARCH REPORT

International application No.
PCT/IB04/52224

Continuation of B. FIELDS SEARCHED Item 3:

BRS search terms: gestation?, sperm, calculat?, fertil?, disc, disk, wheel, ultrasound, cervix, survive, survival, menstrual, period, mother